

GRADING AND DRAINAGE PLAN NOTES

- BOUNDARY & TOPOGRAPHY INFORMATION IS BASED ON A SURVEY TITLED "TOPOGRAPHIC SURVEY OF PROPERTY, LOT NO.16&17, BLOCK 1904, TOWNSHIP OF SOUTH ORANGE VILLAGE, COUNTY OF ESSEX, NEW JERSEY" BY MORGAN ENGINEERING & SURVEYING DATED 2/5/2017.
- THE GENERAL CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND, WHERE POSSIBLE MEASUREMENTS SHOULD BE TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- THE GENERAL CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATIONS OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND TO ENSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE UTILITY COMPANIES AS TO LOCATION AND SCHEDULING OF CONNECTIONS TO THEIR FACILITIES.
- EXCAVATED MATERIAL CONTAINING ROCK OR STONE GREATER THAN SIX (6) INCHES IN LARGEST DIMENSION IS UNACCEPTABLE AS FILL TO WITHIN THE PROPOSED BUILDING AND PAVING AREA.
- ROCK OR STONE LESS THAN SIX (6) INCHES IN LARGEST DIMENSION IS ACCEPTABLE AS FILL TO WITHIN TWENTY-FOUR (24) INCHES OF SURFACE OF PROPOSED SURGED WHEN MIXED WITH SUITABLE MATERIAL AS PERMITTED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- ROCK OR STONE LESS THAN TWO (2) INCHES IN LARGEST DIMENSION AND MIXED WITH SUITABLE MATERIAL IS ACCEPTABLE AS FILL WITHIN THE UPPER TWENTY-FOUR (24) INCH OF PROPOSED SUBGRADE AS PERMITTED BY THE OWNER'S GEOTECHNICAL ENGINEER.
- COMPACTION CRITERIA FOR FILL PLACED IN THE FOLLOWING AREAS SHALL MEET OR EXCEED THE FOLLOWING MINIMUM PERCENTAGE OF MAXIMUM MODIFIED PROCTOR DRY DENSITY AS DETERMINED BY ASTM D-1557 USED ON REPRESENTATIVE SOIL SAMPLES, UNLESS MORE STRINGENT CRITERIA GIVEN ELSEWHERE:

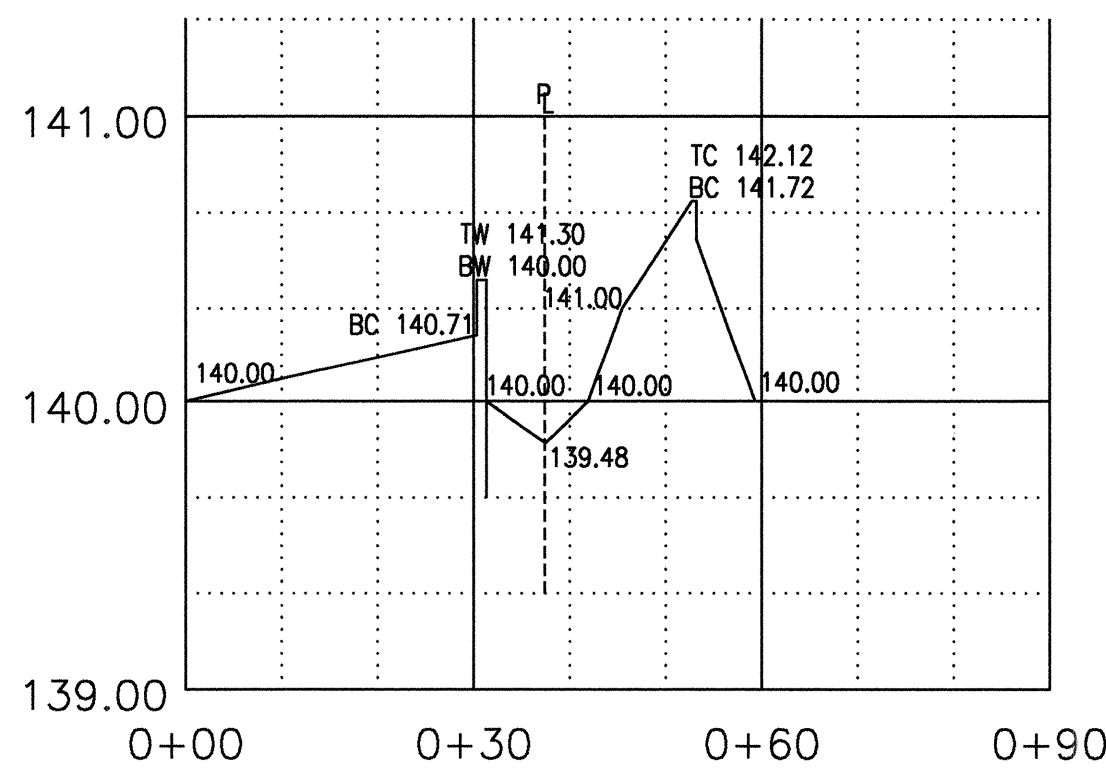
FILL AREA	STANDARD PROCTOR DRY DENSITY
SIDEWALKS	95%
PAVEMENTS AND ROADWAYS	95%
LANDSCAPE AREAS	93%
TRENCH BACKFILL	SAME AS SURROUNDING AREA
- GRADE ALL AREAS WHERE FINISH GRADE ELEVATIONS OR CONTOURS ARE INDICATED ON DRAWINGS. GRADED AREAS SHALL BE UNIFORM AND SMOOTH, FREE FROM ROCK, DEBRIS, OR IRREGULAR SURFACE CHANGES. FINISHED SUBGRADE SURFACE SHALL NOT BE MORE THAN 0.10 FEET ABOVE OR BELOW ESTABLISHED FINISHED SUBGRADE ELEVATION, AND ALL GROUND SURFACES SHALL VARY UNIFORMLY BETWEEN INDICATED ELEVATIONS.
- ALL CONCRETE, UNLESS OTHERWISE NOTED OR SPECIFIED BY REGULATORY AUTHORITIES, SHALL BE 4000 PSI.
- REPRESENTATIVES OF THE MUNICIPALITY SHALL HAVE THE RIGHT TO INSPECT THE DRAINAGE FACILITIES LOCATED ON THE PROPOSED LOTS FROM TIME TO TIME AS DEEMED NECESSARY.
- CATCH BASINS SHALL BE CLEANED OUT PERIODICALLY TO PREVENT THE BUILDUP OF SEDIMENT AND DEBRIS IN STRUCTURES.

STORMWATER NOTE:

THE PROPOSED DEVELOPMENT WILL REDUCE IMPERVIOUS LOT COVERAGE FROM 100 PERCENT UNDER EXISTING CONDITIONS TO 78.3 PERCENT UNDER PROPOSED CONDITIONS. THIS REDUCTION IN IMPERVIOUS LOT COVERAGE WILL REDUCE BOTH THE VOLUME OF STORM RUNOFF AND PEAK FLOW OF STORM RUNOFF FROM THE SITE THUS PROVIDING A BENEFIT TO THE EXISTING DOWNSTREAM STORMWATER SYSTEM.

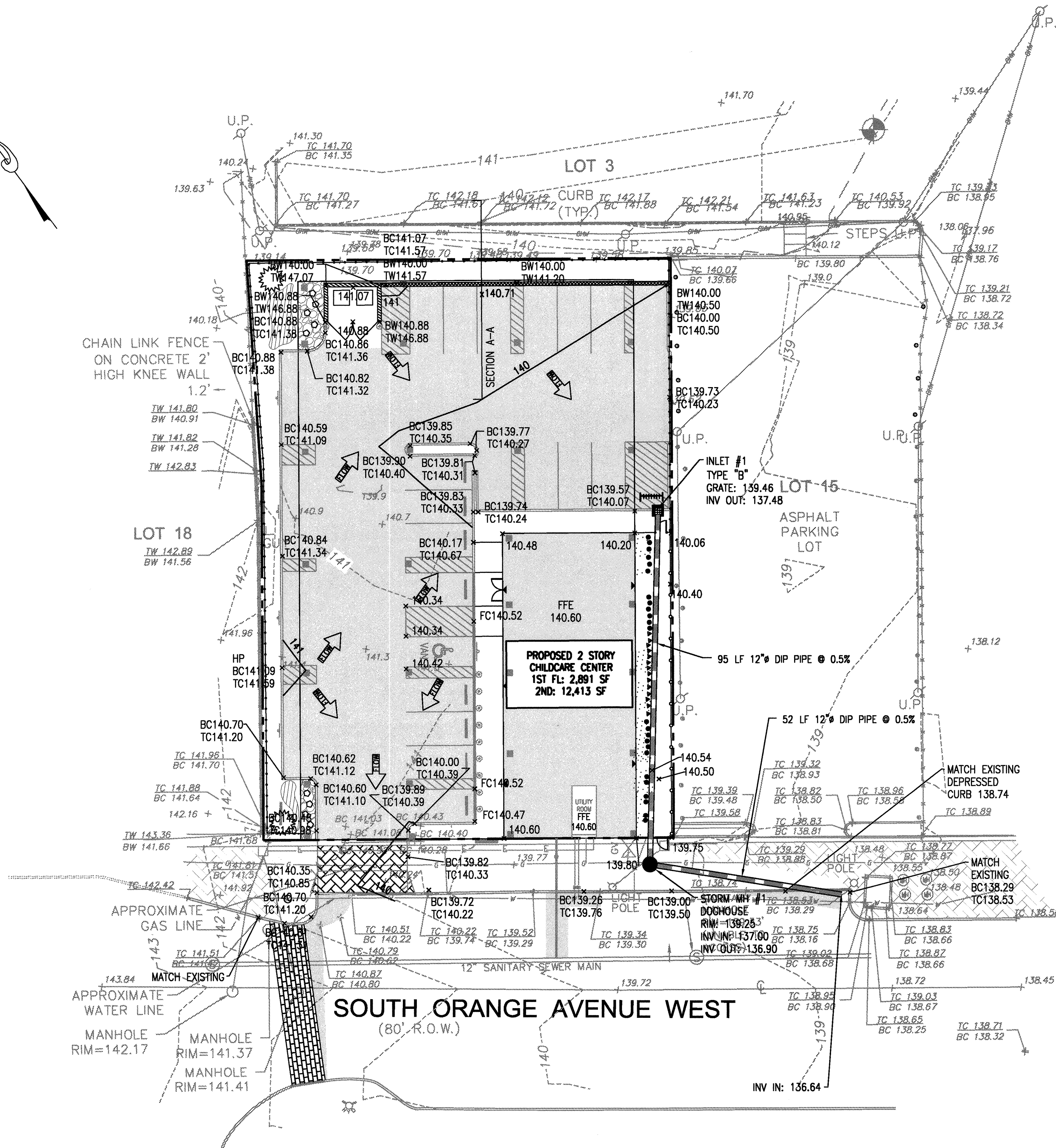
LEGEND

	EXISTING	PROPOSED
STORM SEWER	N/A	
PROPERTY LINE		
MANHOLE	N/A	
CATCH BASIN	N/A	
SPOT ELEVATION	TC: 130.57' BC: 102.42'	99.30'
CONTOUR		



SECTION A-A

SCALE: 1"=20'



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Engineering  
Interior Design  
Implementation Services

ISSUE

NO.	DATE	DESCRIPTION	INT.
1	1.17.19	FOR COMPLETENESS REVIEW	GPG
2	4.16.19	FOR MAY 6TH HEARING	GPG
3	5.17.19	FOR 6.3.19 PLANNING BOARD	GPG

REVISION

NO.	DATE	DESCRIPTION	INT.
1	5.8.19	PER MAY 4, 2019 REVIEW MEMO	APP

PRINCIPALS

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NJ State Board Of Engineers & Land Surveyors Authorization No. 24240803000

Project: THE LEARNING EXPERIENCE  
109 & 115 SOUTH ORANGE AVENUE WEST  
TOWNSHIP OF SOUTH ORANGE VILLAGE  
ESSEX COUNTY, NJ  
BLOCK 1904, LOTS 16&17

Project No:	Scale:
TLENJ-5-17-264	1" = 20'
Drawn By:	Approved By:
LB	GPG
Drawing Name:	

GRADING AND DRAINAGE PLAN

Drawing Number:	
C-400	
Sheet No:	of:
5	13
Initial Date:	GERARD P. GESARIO PROFESSIONAL ENGINEER JANUARY 3, 2019
	N.J. LIC. #GE038255